



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/687,654	10/13/2000	Dan Molander	082329/0103	6641

7590 12/10/2002

Marshall J. Brown
Foley & Lardner
Suite 3300
330 North Wabash Avenue
Chicago, IL 60611-3608

EXAMINER	
CASTELLANO, STEPHEN J	
ART UNIT	PAPER NUMBER
3727	

DATE MAILED: 12/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

Office Action Summary

Applicati n No.

09/687,654

Applicant(s)

MOLANDER, DAN

Examiner

Stephen J. Castellano

Art Unit

3727

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____.

Art Unit: 3727

In view of the Appeal Brief filed on October 11, 2002, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

It is noted that the present invention provides panels made of a different plastics material than the hinge elements. The reverse statement, however, is not true. The hinge elements can't be formed from a different plastics material than the panels because the panels when molded encapsulate or impregnate a portion of the hinge element material and therefore, portions of the panels are formed from the identical plastics material as the hinge elements.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 and 10-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Art Unit: 3727

The process of making the blank includes the step of placing a net (2) of either rubber-modified polypropylene or rubber-modified polyethylene in a mold and injecting molten copolymer polypropylene or polyethylene to form the panels (44-68). Figures 4A-4C depict progressive stages of the panel injection molding wherein the molten polypropylene flows over (and under) the net (2), the materials of the net (rubber-modified polypropylene) and the panel (polypropylene) fuse to form a blank as stated in lines 13-20 of page 5 of the specification. The cross section of Fig. 4C shows the blank having the identical material as the hinge element.

Claim 1 states that “the hinge elements being formed from different plastics material than the panels” was not originally disclosed. The hinge net plastic material is identical to the portion of the net plastic material which becomes part of the panel. **This is a new matter rejection.**

Claims 1-8 and 10-13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The application only specifies how to make hinge elements of a plastic material which is identical to one of the plastic materials of the panel rather than from a different plastics material.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the box" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the box" in line 2. There is insufficient antecedent basis for this limitation in the claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5-9, 11-14, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewallen.

This reference is applied insofar as the invention is understood to include panels which have an identical plastics material as the hinge and a different plastics material as the hinge.

Lewallen discloses a unitary box blank formed from plastics material and comprising a plurality of hinge elements connecting and fused to a plurality of panels for forming sides of the box, the hinge elements being formed from a different plastics material than the panels because the hinge is either formed from polypropylene, high density polyethylene or ethylenebutene copolymers, only, while the panel has a laminated structure wherein only a central layer is made of the same material as the hinge and the other layers can include foamed polyethylene as an insulating layer or layers and skin layers which could include Mylar, acrylonitrile-butadiene-styrene (ABS) copolymer, or virtually any other material.

For claims 8, 9 and 14-17, all the panels are considered to be both structural panels and load bearing panels. The blank once constructed into a box will have vertical hinges or hinge elements formed parallel (or not perpendicular) to the intended direction of load support when

Art Unit: 3727

more than one boxes are stacked. The box could be reoriented such that hinged bottom and top panels would be vertically extending with the top and bottom positioned front-to-back or side-to-side.

Claims 1-3, 6, 8, 9 and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Delamour et al. (Delamour).

Claims 1-3, 7-9 and 11-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al. (Brown).

Brown discloses a twin sheet thermoformed thermoplastic sleeve half (26) which defines a unitary box blank formed from plastics material and comprising a plurality of hinge elements (54) connecting and fused to a plurality of panels for forming sides of the box, the hinge elements being formed from a different plastics materials than the panels. The panels are plastic formed of two layers or sheets in a twin-sheet thermoforming process (see Fig. 4 cross section) and the hinge is plastic of a single layer (see Fig. 5 cross section). The panels are structural and load bearing. The hinge element plastic has greater toughness and less rigidity than the panel plastic. The hinge elements have projections (80) which protrude from the panels.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 6, 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewallen in view of Reuter, Jones, Darras, Roe et al. (Roe) and Miller.

Lewallen discloses the invention except for the materials of rubber-modified polyethylene and rubber-modified polypropylene. Reuter teaches rubber-modified polypropylene as a flexible hinge material. Jones teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material for flexibility and gas and water impervious properties. Darras teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material. Roe and Miller both teach the equivalent materials of rubber-modified polyethylene and rubber-modified polypropylene. It would have been obvious to modify the polyethylene or polypropylene of the hinge element of Lewallen to be either rubber-modified polyethylene or rubber-modified polypropylene to provide a flexible yet gas and water impervious barrier for a hinge to keep water either out of the box or inside of the box and to prevent contamination.

Claims 2, 4, 6, 10, 11 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delamour in view of Lewallen, Reuter, Jones, Darras, Roe and Miller.

Delamour disclose the invention except for the materials of rubber modified polypropylene, polypropylene, polyethylene and rubber modified polyethylene for the hinge element and polypropylene and polyethylene for the panels. Lewallen teaches both polyethylene and polypropylene for both the hinge and panels. Reuter teaches a lid which has flexible hinge portions, the entire lid is made of rubber modified polypropylene. Reuter teaches rubber-modified polypropylene as a flexible hinge material. Jones teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material for flexibility and gas and water impervious properties. Darras teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material. Roe and

Art Unit: 3727

Miller both teach the equivalent materials of rubber-modified polyethylene and rubber-modified polypropylene. It would have been obvious to modify the hinge elements to be polyethylene, polypropylene, rubber modified polypropylene or rubber modified polyethylene in order to provide a flexible material which is durable as well. It would have been obvious to make the panels polyethylene or polypropylene in order to provide a durable and easily cleanable surface.

Claims 4-6, 10 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Reuter, Jones, Darras, Roe and Miller.

Brown disclose the invention except for the materials of rubber modified polypropylene, polypropylene, polyethylene and rubber modified polyethylene for the hinge element and polypropylene for the panels. Reuter teaches a lid which has flexible hinge portions, the entire lid is made of rubber modified polypropylene. Reuter teaches rubber-modified polypropylene as a flexible hinge material. Jones teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material for flexibility and gas and water impervious properties. Darras teaches rubber-modified polyethylene used in place of polyethylene or polypropylene as an equivalent material. Roe and Miller both teach the equivalent materials of rubber-modified polyethylene and rubber-modified polypropylene. It would have been obvious to modify the hinge elements to be polyethylene, polypropylene, rubber modified polypropylene or rubber modified polyethylene in order to provide a flexible material which is durable as well. It would have been obvious to make the panels polypropylene in order to provide a durable and easily cleanable surface.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art

Art Unit: 3727


of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at (703)872-9302. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into group 3720 will be promptly forwarded to the examiner.

Art Unit: 3727

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Castellano whose telephone number is (703)-308-1035.


Stephen Castellano
Primary Examiner
Art Unit 3727

June 18, 2002